Landscape Scale Scrub Clearance

Batts Combe Quarry, Warrens Hill, Cheddar, Somerset

Hanson Quarry Products Europe Ltd.

BIG Challenge 2015 submission category: Large scale permanent

Project overview

Batts Combe Quarry is situated within the rural landscape of the Mendip Hills, Area of Outstanding Natural Beauty.

The quarry extraction area and surrounding landholding covers 191ha of quarry, woodland and grassland and includes The Perch SSSI.

Diverse grassland habitats in Mendip are threatened by scrub encroachment as a result of a lack of management.

Since 2008 Hanson UK have worked on a program of management to reverse the decline. Since 2008 c.13ha of scrub has been cleared at a cost of c. £22,000. 7ha has been cleared in several phases on The Perch SSSI (2008, 2009, 2014 and 2015).

This has been partly in partnership with Aggregate Industries, the Mendip Hills

AONB and Natural England. Elsewhere in Hanson UK's landholding there are has been a further 6ha of clearance on virgin habitat including a future green hay donor site and on restored quarry waste tips.

Photo: Scrub clearance

What were the biodiversity conditions on site, prior to the enhancement?

Biodiversity within Hanson UK landholding was in a state of decline prior to 2007. This was as a result of permitted quarry development leading to woodland and grassland clearance.

A lack of land management operations on non-quarry areas led to scrub encroachment on to grassland and sterile woodland habitats.

Were there any specific conditions that led to you carrying out this work?

Until 2008 works were carried out on The Perch SSSI supported by a Wildlife Enhancement Scheme agreement with Natural England.

Elsewhere on the landholding, land management has been voluntarily driven by Hanson since 2006 through the site's Biodiversity Action Plan (BAP) this aims amongst other targets to improve the quality of grassland habitats.

Partnership with neighbouring land owners to

manage The Perch SSSI has also been an important contributing factor. Since 2014 Hanson UK have held a Higher Level Stewardship agreement which supports the biodiversity aims of both the site and Natural England.

What were the biodiversity measures taken?

Clearance of 13ha of scrub across the landholding has increased the quality of remnant lowland meadow and calcareous grassland habitats and also increased the extent and connectivity of the resource as scrub habitats have been replaced with grassland.

The clearance has supported the aims of the site BAP and also those of the UK and local BAP through the management of species-rich grassland habitats and their associated species.

Scrub clearance can be carried out any where it is required but it is important to consider not only the initial clearance costs but the need for long term management.

At Batts Combe Quarry there are grazing tenants in place for all but c.2ha of the grassland habitat resource. Appropriate grazing regimes help to maintain the cleared habitat but can be a difficult balance to strike on poor ground where the need to allow wildflowers to set seed with grazing material availability and supplementary feeding requirements are all a challenge.

Photo: The perch post scrub clearance 2009

At Batts Combe, bracken and scrub regrowth control also needs managing with applications of herbicide or through cutting. The remaining 2ha will require periodic mechanical management.

Scrub clearance on this scale has required access to specialist equipment; for large trafficable areas a tractor with rear mounted flail was required but for very difficult access areas i.e. steep or uneven sites, cutting by hand and chainsaw was needed or an excavator with flail mounted on the arm.

Scrub clearance on this scale has only been possible through the financial and knowledgeable support of Natural England and their Countryside Stewardship schemes e.g. HLS.

The expertise and time given by neighbouring land owners including the Mendip AONB and Aggregate Industries has also helped support the project and input from volunteer ecological surveyors carrying species monitoring e.g. butterflies and adders helps to direct our ongoing management.

How would you best describe the project?

An enhancement.

Further information

The WES first supported the need for scrub clearance on The Perch SSSI and helped to pay for both clearance in 2008 and the previously installed fences and water to enable grazing.

The scrub cleared on The Perch in 2008 and 2009 was carried out by tractor and flail and was directed closely by the Mendip AONB Warden who had the knowledge and experience to target the clearance effectively.

The site BAP drove further clearance on The Perch and in the quarry after 2008 and the HLS application in 2014. Work carried out Bow Pit Tip and the green hay donor site in 2008 site was carried out by excavator and flail due to difficult ground conditions.

The HLS was granted in 2013 and a large-scale scrub clearance operation then took place on The Perch, The Combe and Eastern Field using tractor and flail and chainsaw.

The HLS also paid for the fencing and water required to enable grazing in perpetuity. The objectives of the original 2006 BAP to increase the extent and improve the quality of existing grassland habitats have been met, and the BAP was updated in 2012 to reflect the goals achieved and identify ongoing management targets.

Photo: The perch post scrub clearance 2012

Important lessons are the need to have a reliable grazing tenant, to use herbicide applications and mechanical control to effectively control scrub re-growth and bracken that can threaten the grassland resource and not be afraid to clear large areas of scrub to regain grassland.

What was your personal motivation for carrying out the enhancement?

The role of Landscape Architect includes achieving the corporate biodiversity, restoration and sustainability targets of Hanson UK in the southern region. More importantly however having good personal relationships with the individuals within the partner organisations and those involved in the project has proved vital.